

## Stevens County

### Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/28/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 16 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Stevens County economy.<sup>1</sup>

These 16 sectors have a total direct output of approximately **\$229.5 million** and support **849 jobs** in Stevens County. Running the model for all 16 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Stevens County Economy					
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>
Direct Effect	849.3	28.07%	\$65,069,525	32.14%	\$229,511,118
Indirect Effect	216.1	7.14%	\$15,249,659	7.53%	\$31,694,897
Induced Effect	120.2	3.97%	\$8,453,880	4.18%	\$16,761,380
<b>Total Effect</b>	<b>1185.6</b>	<b>39.19%</b>	<b>\$88,773,064</b>	<b>43.85%</b>	<b>\$277,967,395</b>

As shown in the above table, agriculture, food, and food processing sectors support **1,186 jobs**, or **39.19%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 16 agriculture, food, and food processing sectors is approximately **\$88.8 million**, or **43.85% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the support activities for agriculture and forestry sector is the top employer with **396 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Stevens County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Support activities for agriculture and forestry	396.2	\$17,670,168
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	160.6	\$45,326,974
Grain farming	148.4	\$119,739,326
Wholesale trade	54.8	\$10,588,615
Real estate	52.1	\$3,655,622
Cotton farming	41.5	\$10,192,009
Animal production, except cattle and poultry and eggs	34.6	\$7,800,481
Truck transportation	29.4	\$4,520,363
Vegetable and melon farming	26.7	\$5,427,870
Limited-service restaurants	18.1	\$1,409,653

The grain farming sector directly contributes approximately **\$119.7 million** to the Stevens County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Grain farming	148.4	\$119,739,326
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	160.6	\$45,326,974
Support activities for agriculture and forestry	396.2	\$17,670,168
Fluid milk manufacturing	16.5	\$11,140,103
Wholesale trade	54.8	\$10,588,615
Cotton farming	41.5	\$10,192,009
Animal production, except cattle and poultry and eggs	34.6	\$7,800,481
Oilseed farming	3.1	\$6,804,633
Vegetable and melon farming	26.7	\$5,427,870
Owner-occupied dwellings	0.0	\$4,890,558

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Stevens County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	3.1	\$6,804,632.66
Grain farming	148.4	\$119,739,326.48
Vegetable and melon farming	26.7	\$5,427,869.80
Fruit farming	0.3	\$24,048.99
Tree nut farming	0.0	\$19.47
Greenhouse, nursery, and floriculture production	2.5	\$337,561.13
Cotton farming	41.5	\$10,192,008.97
All other crop farming	8.6	\$1,443,578.00
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	160.6	\$45,326,972.96
Dairy cattle and milk production	7.2	\$3,062,465.43
Poultry and egg production	0.2	\$229,400.23
Animal production, except cattle and poultry and eggs	34.6	\$7,800,480.37
Support activities for agriculture and forestry	396.2	\$17,670,167.92
Fluid milk manufacturing	16.5	\$11,140,103.34
Bread and bakery product, except frozen, manufacturing	1.0	\$123,950.71
Veterinary services	1.9	\$188,531.47

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Stevens County, the retail sector was omitted.